

## **REMARKS**

Claims 18, 21-25, 27, 28, 30, 34 and 35 are pending in this application. By this Amendment, claims 18, 27, 28 and 34 are amended, and claim 36 is cancelled. No new matter is added.

In view of the amendments and the following remarks, reconsideration and allowance of the application are respectfully requested.

### **I. Claim Rejection Under 35 U.S.C. § 101**

The Office Action rejects claim 34 under 35 U.S.C. § 101 allegedly because the claimed invention is directed to non-statutory subject matter. Applicants respectfully traverse the rejection. However, in order to expedite prosecution, Applicants amend claim 34 to recite “[a] method a sterilizing/disinfecting,” as suggested by the Examiner. Support for amended claim 34 can be found, for example, at page 32, lines 14-29, and page 98, line 24 - page 108, line 7, of the originally filed specification. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

### **II. Claim Rejections Under 35 U.S.C. § 103**

#### **A. The Prior Art References**

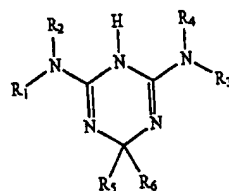
Moinet ‘122 (WO 01/55122) published from international application number PCT/FR01/00241, and was published in French on August 8, 2001. Moinet ‘530 (U.S. Patent Application Publication No. 2003/0109530) was published on June 12, 2003, and is the published application of U.S. Serial No. 10/181,223, which is the national stage filing of PCT/FR01/00241. Moinet ’021 (U.S. Patent No. 7,034,021) issued from U.S. Serial No.

10/181,223, and was published on April 25, 2006. Thus, Moinet '530 and Moinet '021 are counterpart applications to Moinet '122 and are thus presumed to have identical disclosures. Because Moinet '021 was published in English, Applicants refer to this patent.

**B. Moinet '122 (WO 01/55122)**

The Office Action rejects claims 18, 21-25, 27, 28, 30, 35 and 36 under 35 U.S.C. § 103(a) as being unpatentable over Moinet '122 (WO 01/55122). By this Amendment, claim 36 is cancelled, rendering the rejection moot. As for the remaining claims, Applicants respectfully traverse the rejection.

By this Amendment, claim 18 is amended to delete R<sub>1</sub> is "an optionally substituted alkyl group of 1 to 16 carbon atoms, the substituents being the substituents on the phenyl group or phenylalkyl group as defined in (i) above"; claim 27 is amended to delete R<sub>1</sub> is "n-butyl, n-hexyl, n-heptyl"; and claims 27 and 28 are amended to become independent claims.



Moinet discloses a compound of formula (I) , wherein R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> and R<sub>4</sub> are chosen independently from the groups: (1) H; (2) (C<sub>1</sub>-C<sub>20</sub>)alkyl; (3) (C<sub>2</sub>-C<sub>20</sub>)alkylene; (4) (C<sub>2</sub>-C<sub>20</sub>)alkyne; (5) (C<sub>3</sub>-C<sub>8</sub>)cycloalkyl; (6) (C<sub>3</sub>-C<sub>8</sub>)heterocycloalkyl; (7) (C<sub>6</sub>-C<sub>14</sub>)aryl(C<sub>1</sub>-C<sub>20</sub>)alkyl; (8) (C<sub>6</sub>-C<sub>14</sub>)aryl; and (9) (C<sub>1</sub>-C<sub>13</sub>)heteroaryl; or (10) it being possible for R<sub>1</sub> and R<sub>2</sub> to form with the nitrogen atom an n-membered ring (n is between 3 and 8); wherein each substituent is optionally substituted. See Moinet '021, cols. 1-2.

Namely, each of R1, R2, R3 and R4 can be substituents (1) – (11). Therefore, a great number of combinations of substituents R1, R2, R3 and R4 are present in the compound of formula (I).

Thus, Moinet very broadly and vaguely covers the combination of “R1 and H” at the 2-position, and the combination of “R21 and H” at the 4-position of the dihydrotriazine compound of formula (1a) of the claimed invention.

Moinet does not specifically disclose the combination of “R1 and H” at the 2-position, and the combination of “R21 and H” at the 4-position of the dihydrotriazine compound, as recited in claim 18.

On page 5 of the Office Action, the Examiner asserts that the genus of compounds of Moinet overlap with the claimed genus of compounds. See Office Action at page 5, table and first paragraph. However, Moinet does not teach or suggest the claimed compounds.

With regard to the disclosure of specific combinations of R1-R4 of Moinet’s formula (I), Moinet teaches that "a more particular group of compounds of formula (I) is that in which R1 and R2 are chosen independently from the groups specified above with the exception of the hydrogen atom and R3 and R4 represent a hydrogen atom," and that "a preferred group of compounds of formula (I) is that in which R1 and R2 are an alkyl, advantageously methyl group and R3 and R4 represent a hydrogen". See Moinet at col. 3, lines 53-59.

Further, Moinet teaches the following combination of substituents at the 2- and 4-positions:

	The 2-position	The 4-position	Compound No.
(1)	dimethylamino	amino	1, 3-7, 10-13, 18 19, 24, 25, 27-45
(2)	dimethylamino	dimethylamino	2, 15
(3)	dimethylamino	1-propen-3-ylamino	8, 26
(4)	dimethylamino	isopropylamino	9
(5)	dimethylamino	ethylamino	14, 23
(6)	dimethylamino	methylamino	16, 22,
(7)	dimethylamino	pyrrolidin-1-yl	17, 21,
(8)	phenylethylamino	amino	20

See Moinet '021 at Table II, cols. 7-22.

Thus, Moinet only provides the combinations of (1) – (8) as recited in the above table. In other words, Moinet only discloses compounds of formula (I) wherein R1 and R2 are chosen independently from the groups: H, (C1-C20) alkyl; and R3 and R4 are chosen independently from the groups: H, (C1-C20) alkyl and (C2-C20) alkenyl, or R3 and R4 can form with the nitrogen atom an n-membered ring (n between 3 and 8).

On the other hand, Moinet does not teach or suggest a compound of formula (1a) wherein (1) the **2-position** is an amino group mono-substituted by a phenyl, phenylalkyl, naphthyl, naphthylalkyl, heterocyclic group, heterocyclic alkyl group, heterocyclic aminoalkyl group, cycloalkyl group or a cycloalkyl-alkyl group, which is unsubstituted or substituted; and (2) the **4-position** is an amino group mono-substituted by a C<sub>7-16</sub> alkyl group, which is unsubstituted or substituted by specific substituent(s), as claimed.

Thus, Moinet does not teach this combination of the 2-position and 4-position, and one of ordinary skill in the art would have had no reason or rationale to have developed such a combination with the disclosure of Moinet. Therefore, one of ordinary skill in the art would have

had no reason or rationale to have developed a compound of formula (1a) wherein R<sub>1</sub> represents an optionally substituted phenyl group, phenylalkyl group, naphthyl group, naphthylalkyl group, heterocyclic group, cycloalkyl group, or cycloalkyl-alkyl group; and R<sub>21</sub> is an optionally substituted alkyl group of 7 to 16 carbon atoms, as claimed, for at least this reason.

Additionally, the compounds disclosed in Moinet are triazine compounds useful in the treatment of pathological conditions associated with the insulin-resistance syndrome (X syndrome), and chronic complications that are in particular due to the formation of “advance glycosylation n-products.” See U.S. Patent No. 7,034,021, column 4, lines 40-64. On the other hand, the dihydrotriazine compounds of formula (1a) exhibit sterilizing and/or disinfecting effects, and are useful as external bactericides and disinfectants. See specification, page 32, lines 19-28. Accordingly, one of ordinary skill in the art would not have been motivated to develop the claimed compounds with the disclosure of Moinet.

In summary, Moinet ‘122 does not teach or suggest the compounds of claims 18, 27 and 28, and one of ordinary skill in the art would have had no reason or rationale to have developed the compounds of claims 18, 27 and 28 with the disclosure of Moinet. Thus, claims 18, 27 and 28 would not have been rendered obvious by Moinet ‘122. Claims 21-25, 30 and 35 depend from claim 18 and, thus, also would not have been rendered obvious by Moinet ‘122. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

**C. Moinet ‘530 (U.S. Patent Application Publication No. 2003/0109530)**

The Office Action rejects claims 18, 21-25, 27, 28, 30 and 36 under 35 U.S.C. § 103(a) as being unpatentable over Moinet ‘530 (U.S. Patent Application Publication No. 2003/0109530)

for the same reasons as indicated above. By this amendment, claim 36 is cancelled, rendering the rejection moot. As for the remaining claims, Applicants respectfully traverse the rejection for the same reasons identified above because Moinet '530 is a counterpart application to Moinet '122. Accordingly, reconsideration and withdrawal of the rejections are respectfully requested.

**D. Moinet '021 (U.S. Patent No. 7,034,021)**

The Office Action rejects claims 18, 21-25, 27, 28, 30 and 36 under 35 U.S.C. § 103(a) as being unpatentable over Moinet '021 (U.S. Patent No. 7,034,021) for the same reasons as indicated above. By this amendment, claim 36 is cancelled, rendering the rejection moot. As for the remaining claims, Applicants respectfully traverse the rejection for the same reasons identified above because Moinet '021 is a counterpart application to Moinet '122. Accordingly, reconsideration and withdrawal of the rejections are respectfully requested.


**III. Conclusion**

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 18, 21-25, 27, 28, 30, 34 and 35 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place the application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,

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